

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number
WO 2005/072459 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/003401

(22) International Filing Date: 28 January 2005 (28.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/539,945 29 January 2004 (29.01.2004) US

(71) Applicant (for all designated States except US): EVER-
EST BIOMEDICAL INSTRUMENTS [US/US]; 16690
Swingly Ridge Road, Suite 140, Chesterfield, MO 63017
(US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): CAUSEVIC, Elvir
[US/US]; 16315 Autumn View Terrace, Ellisville, MO
63011 (US).

(74) Agent: BOOKS, Mark, E.; Polster, Lieder, Woodruff &
Lucchesi, 12412 Powerscourt Drive, Suite 200, St. Louis,
MO 63131 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

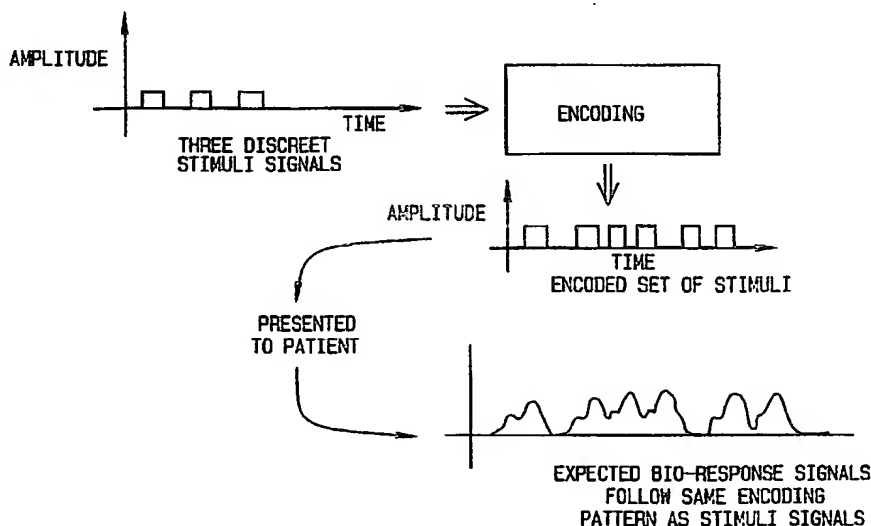
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR SIGNAL ENCODING EVOKED RESPONSES



(57) Abstract: A method and apparatus for utilizing the benefits of encoded signal transmission and reception to enhance the performance of medical testing devices (100) adapted to evoke and measure biological response signals such as auditory evoked potentials (AEP), and the auditory brainstem response (ABR) signals in particular. Auditory stimuli, such as clicks, are presented to the ear of a human patient, in a predetermined encoded sequence, resulting in the generation of auditory responses and bio-electric response signals in the human patient. These response signals from the patient are acquired and observed, and are processed according to the predetermined encoded sequence in which the auditory stimuli were presented to the patient's ear in order to extract the desired auditory evoked potential signals or ABR signals.

WO 2005/072459 A2

WO 2005/072459 A2



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.